

SOV/137-58-8-17455

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 179 (USSR)

AUTHORS: Shul'ts, A.L., Tsyganov, G.A.

TITLE: Polarization During the Electrolytic Deposition of Nickel in the Presence of Additives in the Electrolyte (Polyarizatsiya pri elektroosazhdennii nikelya v prisutstvii dobavok k elektrolitu)

PERIODICAL: Izv. AN UzSSR. Ser. khim. n., 1957, Nr 4, pp 41-53

ABSTRACT: The effect of additions of KCNS, Na₂S₂O₃·5H₂O, and thiourea introduced into the nickel electrolyte (NiSO₄·7H₂O, 1N; Na₂SO₄·10H₂O, 100 g/liter; H₃BO₃, 20 g/liter) on polarization in the electrolytic deposition of Ni was studied. It was established that the polarization curve of the electrolytic deposition of Ni in general consists of three sectors, one with predominance of the separation of Ni, one with evolution of H, and one with the establishment of a stationary potential of the Ni electrode in the given electrolyte. The introduction of additives into the electrolyte affects the position and shape of the said sectors of the polarization curve and, therefore, affects the position and shape of the polarization curve of the electrolytic

Card 1/2

SOV/137-58-8-17455

Polarization During the Electrolytic Deposition of Nickel (cont.)

deposition of Ni. Anion-type additives (KCNS, $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$) cause the displacement of the sector of the polarization curve relative to the electrolytic deposition of Ni corresponding to the process of the predominant separation of Ni in the direction of less negative values of the potential. Additives of the molecular type (thiourea) displace this sector of the polarization curve of electrolytic deposition of Ni towards the more negative values of the potential. The effect of the additives in the electrolyte on the polarization during the electrolytic deposition of Ni is explained by their adsorption on the surface of the cathode, as a result of which complementary ionic and dipolar layers are formed on the cathode-electrolyte interface which promote or impede the processes. Bibliography: 39 references.

L.A.

1. Nickel--Electrodeposition
2. Electrolytes—Properties
3. Nickel--Polarization

Card 2/2

MIRZAKARIMOV, A.M.; TSYGANOV, G.A.

Hydrogen overvoltage on nickel electrodepositions in the presence
of alkaleids. Uzv. khim. zhur. no.2:29-33 '58. (MIRA 11:8)

1. Institut khimii AM USSR.
(Overvoltage) (Hydrogen) (Nickel plating)

TUGOV, N.I.; TSYGANOV, G.A.

Hydrogen and oxygen overvoltage on antimony electrode. Uzb.
khim. zhur, no.2:35-40 '58. (MIRA 11:8)

1. Institut khimii AN UzSSR.
(Overvoltage) (Antimony) (Electrochemistry)

SHUL'TS, A.L.; TSYGANOV, G.A.

Sulfur containing additives used in electrolytic solutions from
which nickel is deposited as a cathodic reduction product. Dokl.
AN Uzb. SSR no.3:35-39 '58. (MIRA 11:6)

1. Institut khimii AN UzSSR. Predstavлено академиком AN UzSSR
S.Yu. Yunusovym.
(Nickel plating)

TSYGANOV, G.A.; MIRZAKARIMOV, A.M.

Oxygen overvoltage curve of nickel electrode in alkaline solutions.
Uzb. khim. zhur. no.3:65-68 '58.
(MIRA 11:9)

1.Institut khimii AN UzSSR.
(Oxygen) (Overvoltage) (Nickel)

CHERNILOVSKAYA, A.I.; TSYGANOV, G.A.

Separation coefficient for simultaneous electrodeposition of
iron group metals. Uzb. khim. zhur. no.4:25-32 '58.
(MIRA 11:12)

1. Institut khimii AN UzSSR.
(Electroplating)

SOV/137-59-3-7175

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 319 (USSR)

AUTHORS: Mirzakarimov, A. M., Tsyganov, G. A.

TITLE: On the Effect of Alkaloids on Polarization During Electrolytic Precipitation of Nickel (O kharaktere vliyaniya alkaloidov na polyarizatsiyu pri elektroosazhdennii nikelya)

PERIODICAL: Dokl. AN UzSSR, 1958, Nr 5, pp 39-42

ABSTRACT: The authors investigated the effect of alkaloids (A) on the cathode potential in the electrolytic deposition of Ni from a sulfate solution at 40°C, pH 4.8 - 5.2, and a cathode cd of 1.10^{-5} - 1.10^{-2} a/cm². The concentration of A in the solution was 1 g/liter. Nicotine and cytisine increase the cathodic polarization (CP) with all cathode cd investigated. Thebaine, anabasine, hyoscyamine, thalatamine, and delsine produce an increase in CP with cathode cd of 3.10^{-4} a/cm² and depolarize the cathode at lower cathode cd. Hormine, papaverine, and aconotine have the same effect on CP, but the transition from the increase in CP to its depolarization occurs at a cathode cd of 3.10^{-3} a/cm², and the depolarization of the cathode at a lower cathode cd is more pronounced. The cathode depolarization is explained by

Card 1/2

SOV/137-59-3-7175
O.1 the Effect of Alkaloids on Polarization During Electrolytic Precipitation (cont.)

the reduction of A, the polarization by the effect of A on the double electric layer
on the cathode.

N. K.

Card 2/2

TSYGANOV, G.A.; TUGOV, N.I.

Rational methods of hydrometallurgical processing of mixed
antimony ores. Uzb.khim.zhur. no.6:19-28 '58. (MIRA 12:2)

1. Institut khimii AN UzSSR.
(Antimony ores) (Hydrometallurgy)

ADILOV, T.A.; TSYGANOV, G.A.

Depolarisation in joint electrodeposition of cobalt and nickel
on a rotating disk cathode. Dokl.AN Uz.SSR no.9:27-29 '58.
(MIRA 11:12)

I. Institut khimii AN UzSSR. Predstavleno chlenom-korrespondentom
AN UzSSR Kh.U.Usmanovym.
(Depolarization(Electricity)) : (Electroplating)

IOSILEVICH, A.I.; TSYGANOV, G.A.

Separation coefficient during the electrodeposition of cobalt
and nickel from electrolytes with different anions. Uzb.khim.
zhur. no.1:43-49 '59. (MIRA 12:6)

1. Institut khimii AN UzSSR.
(Cobalt) (Nickel) (Electroplating)

PHASE I BOOK EXPLOITATION 507/2216

5(4) Soveshchaniye po elektrokhimi. 4th, Moscow, 1956.

Sovetskii [sobernik] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 668 p. Errata slip inserted. 500 copies printed.

Sponsoring Agency: Akademii nauk SSSR. Otdeleniye khimicheskikh

nauk.

Editorial Board: A.N. Prunkin (Resp. Ed.), Academician, O.A. Yesin, Professor; S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor; Professor; S.I. Zhdanov (Resp. Secretary); B.M. Kabanov, Professor; Ya. N. Kolyagin, Doctor of Chemical Sciences; V.V. Losov, Ph.D., Doctor of Chemical Sciences; Z.A. Soler'yuvali, V.V. Steiner, Professor; Lur'e, Professor; Prokof'ev, Z.A.; Soler'yuvali, V.V.; Steiner, Professor; and O.M. Florianskii; Ed. of Publishing House: M.G. Tegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports are included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Yesinov, O.A.; A.I. Chernillovskaya, and A.I. Tsvilovich
Institut Khimii AN UzSSR-Institute of Chemistry, Academy

Card 21/34

or Sciences, USSR). Separation Coefficient During Simultaneous Electrodeposition of Metals of the Iron Group 536
Zotinovich, D.P., and M.Ye. Mechavera. Cathodic Processes During the Separation of Zinc and Hydrogen at Electrodes 541
Shil'son, M.A. Role of a Side Anion in the Process of Chromium Electropothesis 547

Turkov, V.A. (Lesotekhnicheskiy Institut Arkhangelsk). Neutralization of Metallic Ions at Faraday Distance From the Cathode 550
Chizhikov, D.M., and L.Y. Pliginskaya. Influence of Boric Acid on the Cathodic Polarization of Nickel in Sulfuric Acid Solutions 553

Card 22/34

TSYGANOV, G. A.

PHASE I BOOK EXPLOITATION SOV/2216

• 5(*)
 • Sverehimiya po elektrokhimi. 4th, Moscow, 1956.
 • Trudy... [is born!] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1956. 863 p. Errata aliv inserted. 2,500 copies printed.
 • Publishing Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauch.

Editorial Board: A.N. Pruznick (Read. Ed.) Academician, O.A. Yasin, Professor, S.I. Zhdanov (Responsible Secretary) R.N. Kabanov, Professor, Professor, S.I. Zhdanov (Responsible Secretary), B.M. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences, V.V. Lajev, P.D. Lukovtsev, Professor, Z.A. Solov'yeva, V.V. Stender, Professor, and G.M. Florinovich, Ed. of Publishing House: N.G. Tegorov, Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodes and industrial electrolysis. Abstracts of discussions are given at the end of each division. Abbreviations of reports not included here have been given. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Kargin, D.S., and M.V. Stranski, (Dnepropetrovsk Institute of Chemical Technology, Chernihivsky), Polarization

of Graphite Electrodes During the Anodic Separation of Chlorine

Bulyanova, N. Ye., and G.A. Tsyganov (Institute of Chemistry, Academy of Sciences-USSR), Hydrogen Overvoltage At

Electrodes With Homogeneous Surface

Barber, A., K. I. Naumova, and E.Y. Katsatin (Physicochemical Institute imeni L. Ya. Karpov), Mechanism of the Simultaneous Electrochemical Formation of Peroxulfuric Acid,

Ozone and Oxygen at a Platinum Anode in Sulfuric Acid

Solutions

Voltov, G.R., Z. L. Kitba, Ye. K. Susurova, and N. V. Chernat-

-Shinaia, Influence of Surface Active Substances on the

Rate of Decomposition of Sodium Amalgama

II: in, G. O., and V.I. Strischchenko (Novocherkassk Polytechnic

Card 33/ 34

4: Transactions of the Fourth Conference (Cont.) SOV/2216

Institute imeni S. Ordzhonikidze, Influence of the Nature of an Electrolytic Cation on the Anode Process During the Electrolysis of Alkaline Earth-Metal Chloride Solutions

Voronin, N. N. (Decanned), B. G. Priluchenko, A. A. Yednyar'yan,

O. V. Irtegov, I. G. Pavlenko, Ye. K. Samtenko, and S.V.

Kharchuk (Kirov Polytechnic Institute). Electrolytic

Reduction of Oxygen at Porous Cathodes

Discussion [N. A. Pedotov, R. I. Kaganovich, Ye. M. Kuchinov]

G.N. Kokhanov, and contributing authors]

AVAILABLE: Library of Congress

TM/ac
9-30-59

TSYGANOV, G. A., TUGOV, N. I.

Electrolysis of antimony in sodium sulfide solutions using
powdered iron electrodes. Uzb. khim. zhur. no.2:36-51 '59.
(MIRA 12:7)

1. Institut khimii AN UzSSR.
(Antimony) (Electrolysis)

MIRZAKARIMOV, A.M.; TSYGANOV, O.A.

Hydrogen overvoltage on active galvanic nickel deposits.
Uzb.khim,zhur. no.4:29-33 '59. (MIRA 13:1)
(Overvoltage) (Nickel plating)

MURASHKINA, I.I.; TSYGANOV, G.A.

Direct cathode reduction of sparsely soluble compounds. Dokl.
AN Uz.SSR no.5:37-39 '59. (MIRA 12:8)

1. Institut khimii AN UzSSR. Predstavлено akad. AN UzSSR
S.Yu.Yunusovym.
(Lead chloride) (Reduction, Electrolytic)

IOSILEVICH, A.I.; TSYGANOV, G.A.

Mechanism of the influence of anions on the value of the distribution coefficient in the simultaneous electrodeposition of cobalt and nickel. Uzb.khim.zhur. no.5:45-49 '59.
(MIRA 13:2)

1. Institut khimii AN USSR.
(Cobalt) (Nickel plating)

MIRZAKARIMOV, A.M.; TSYGANOV, G.A.

Overvoltage of hydrogen on nickel containing oxygen in alkaline
solutions. Dokl. AN Uz. SSR no.7:25-27 '59. (MIRA 12:10)

I.Institut khimii AN UzSSR. Predstavлено акад. AN UzSSR S.Yu.
Yunusovym.
(Overvoltage) (Nickel)

IOSILEVICH, A.I.; TSYGANOV, G.A.

Effect of the conditions of electrolysis on the distribution coefficient during the simultaneous electrodeposition of cobalt and nickel. Uzb. khim. zhur. no.1:38-44 '60. (MIRA 14:4)

1. Institut khimii AN UzSSR.
(Cobalt) (Nickel-plating)

TSYGANOV, G.A.; MURASHKINA, I.I.

Kinetics and mechanism of reactions involved in the indirect cathodic reduction of poorly soluble compounds. Uzb. khim. zhur. no.6:38-44 '60.
(MIRA 14:1)

1. Institut khimii AN UzSSR.
(Reduction, Electrolytic)

BLAVATNIK, V.M.; TSYGANOV, G.A.

Simultaneous electrolytic separation of chlorine and oxygen from
neutral and alkaline solutions of potassium chloride. Uzb.khim.
zhur. 6 no.1:39-44 '62. (MIRA 15:3)

1. Institut khimii AN UzSSR.
(Chlorine) (Oxygen) (Electrolysis)

TSYGANOV, G.A.; MURASHKINA, I.I.

Kinetics and reaction mechanism underlying the cathodic reduction of sparingly soluble compounds. Uzb. khim. zhur.
9 no.4:51-53 '65. (MIRA 18:12)

1. Institut khimii AN UzSSR. Submitted June 17, 1964.

TUGOV, N.I.; TSYGANOV, G.A.

Hydrometallurgical method of preparing metallic antimony from
concentrates. Uzb. khim. zhur. 7 no.2:17-21 '63. (MIRA 16:8)

1. Institut khimii AN UzSSR.
(Antimony—Metallurgy)

CHERNILOVSKAYA, A.I.; TSYGANOV, G.A.

Decomposition of zinc and lead sulfide minerals by nitric acid
solutions. Uzb.khim.zhur. 6 no.6:5-10 '62. (MIRA 16:2)

1. Institut khimii AN UzSSR.
(Zink sulfide) (Lead sulfide) (Nitric acid)

TSYGANOV, G.I.

Experience in meteorological servicing of the regional dispatch service and utilization of the radar station "RUFOR" by the civil aviation weather station at Rostov-on-Don. Meteor.i gidrol. no.6:46-47 Je '57.

(MLRA 10:8)

(Rostov-on-Don--Meteorology in aeronautics)
(Rostov-on-Don--Radar meteorology)

TSYGANOV, I.

Routine flights... Grazhd.av. 17 no.1:17 Ja '60.
(MIRA 13:5)
(Gor'ky--Airlines, Local service)

TSYGANOV, I.

Unused reserves. Fin.SSSR 18 no.9:71-72 S '57. (MIRA 10:10)

1. Zamestitel' nachal'nika upravleniya Gosstrakha po Rostovskoy
oblasti.
(Rostov Province--Insurance)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757310014-2

TSYGANOV, I.

The noisy Arctic, Grazhdanskaya av. 21 no. 8-30, flg 864

(MIRA 384)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757310014-2"

LYUTIKOV, V.; TSYGANOV, I.

~~Why obligations are not fulfilled. Sov. profsoiuzy 4 no.7:~~
35-39 Jl '56. (MLRA 9:10)

(Penza--Bicycles and tricycles)

TSYGANKOV, I.

Mozhaysk today. Zhil.-kom. kholz. 12 no.9:3-4 S '62. (MIRA 16:2)

1. Predsedatel' ispolnitel'nogo komiteta Mozhayskogo rayonnogo Soveta
deputatov trudyashchikhsya.
(Moshaysk—Description)

TSYGANOV, I.

Thirty meters to the ground. Grazhd. av. 20 no.6:3 Je '63.
(MIRA 16:8)
(Instrument landing systems)

ISYGANOV, I.

Born in 1962 and named "Il." Grazhd.av. 20 no.8:6 Ag '63.
(MIRA 16:9)
(Airplanes)

TSYGANOV, I.

Such is nature. Grazhd. av. 22 no.1:27 Ja '65.
(MIRA 18:11)

SOV/89-7-3-5/29

18(6), 21(1)
AUTHORS:Savitskiy, Ye. M., Tylkina, M. A., Tsyganova, I. A.

TITLE:

The Phase Diagram of the System Zirconium - Rhenium

PERIODICAL:

Atomnaya energiya, 1959, Vol 7, Nr 3, pp 231-235 (USSR)

ABSTRACT:

By means of the well-known radiographical and microscopical methods the melting point, the hardness, and the microhardness of the phases were measured. On the basis of these data the phase diagram of the zirconium - rhenium system was set up. In α -zirconium the range of the solid solution of rhenium amounts to ~0.5 % by weight at 800°C. At the eutectic transformation temperature the percentage increases to 2-3 % by weight. In β -zirconium at 1600°C 14.68 % by weight of rhenium and at the eutectic point of transformation at 500-600°C only 8 % by weight are dissolved. In alloys containing more than 4 % by weight of rhenium, a stable β -phase is found. At 1600°C and 25 % by weight of rhenium a eutectic forms. In alloys with a high zirconium content a metastable ω -phase was found to exist. The solubility of zirconium in rhenium at 2500°C is less than 2 % by weight. Three chemical compounds are produced in the system by peritectic reactions: 1) At 2500°C: Zr_5Re_{24} of the α -Mn-type

Card 1/2

SOV/89-7-3-5/29

The Phase Diagram of the System Zirconium - Rhenium

with volume-centered cubic lattice ($a = 9.6 - 9.7 \text{ kX}$). Microhardness amounts to 1000 kg/mm^2 . 2) At 2450°C : ZrRe_2 with hexagonal tightly bound lattice ($a = 5.21 - 5.25 \text{ \AA}$; $c = 8.5 - 8.56 \text{ \AA}$; $c/a = 1.63$). Microhardness 1200 kg/mm^2 . 3) At 1900°C : Zr_2Re σ -phase type with tetragonal lattice ($a = 10.12 \text{ \AA}$; $c = 5.42 \text{ \AA}$; $c/a = 0.535$). Microhardness $700 - 800 \text{ kg/mm}^2$. The phase diagram and microhardness are shown graphically. Photographs are available for some of the ground sections. The radiographic investigations were carried out by P. I. Kripyakevich and Ye. I. Gladyshevskiy at the LGU. There are 7 figures, 1 table, and 8 references, 4 of which are Soviet.

SUBMITTED: April 16, 1959

Card 2/2

TSYGANOV, I. I.

42356: TSYGANOV, I. I. - Novyye metody izgotovleniya goryachikh i kholodnykh shtampovok
v krupnoserijnom proizvodstve. (9-y Gos. podshipnikovyy zavod) V sb: Opyt
novatorov mashinostroyeniya. kuybyshev, 1948, s 253-46.

SO: Leptosis' Zhurnal'nykh Statey, Vol. 47, 1948.

TSYGANOV A, L.

Radio operators of Lvov are making the preparations. Radio no.11:
18 N '63. (MIRA 16:12)

USHAKOV, Pavel Nikolayevich; LYSYAKOV, Anatoliy Grigor'yevich;;
LITVINOV, D.A., kand.tekhn.nauk, retsenzent; TSYGANOV, M.A.,
inzh., retsenzent; OKOROKOV, A.A., inzh., red.; SMIRNOVA,
G.V., tekhn. red.

[Safety regulations in designing and operating hoisting cranes]
Tekhnika bezopasnosti pri ustroistve i ekspluatatsii gruzopod"-
emykh kranov. Moskva, Mashgiz, 1962. 217 p. (MIRA 15:9)
(Cranes, derricks, etc.--Safety regulations)

TSYGANOV, M.A.

Perfect organization of production is an important factor
in the improvement of labor safety. Mashinostroitel'
no.8:1-2 Ag '65. (MIRA 18:11)

1. Zaveduyushchiy otdelom okhrany truda TSentral'nogo
komiteta professional'nogo soyuza rabochikh mashinostroyeniya.

TSYGANOV, M.A.

Improve working conditions of machinery-industry workers by all
means. Mashinostroitel' no.10:1-3 '60. (MIRA 13:10)

1. Glavnnyy tekhnicheskiy inspektor Tsentral'nogo komiteta prof-
soyuza rabochikh mashinostroyeniya.
(Machinery industry--Hygienic aspects)

TSYGANOV, M.A., inzh.; TITOV, A.S., inzh.; SHASHKOV, A.N., kand.tehn.nauk

Consultations on readers' questions. Svar. proizv. no.8:48 Ag
'62. (MIRA 15:11)

1. Otdel okhrany truda TSentral'nogo komiteta professional'nogo soyuza rabochikh mashinostroyeniya (for TSyganov).
2. Glavnoye upravleniye srednikh spetsial'nykh uchebnykh zavedeniy (for Titov).
3. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (for Shashkov).
(Welding)

TSYGANOV, M.; MIKHAYLOVA, V.

Technological progress and industrial safety. Sov. profsoiuzy 16
no.19:33-36 O '60. (MIRA 13:10)

1. Glavnnyy tekhnicheskiy inspektor TSentral'nogo komiteta profsoyuza
rabochikh mashinostroyeniya (for Tsyganov). 2. Tekhnicheskiy inspektor
TSentral'nogo komiteta profsoyuza rabochikh mashinostroyeniya (for
Mikhaylova).

(Machinery industry--Technological innovations)
(Industrial safety) (Industrial hygiene)

TSYGANOV, M.

Obstacles on the path of a project. Sov. profsoiuzy 17 no.20:38
O '61. (MIRA 14:9)

1. Glavnyy tekhnicheskiy inspektor TSentral'nogo komiteta profsoyuza
rabochikh mashinostroyeniya.
(Industrial plants--Design and construction)

IGNATOK, A.I.; TSYGANOV, M.A.; KUGINIS, B.L.; KHRAMTSOV, V.A.;
DUKHANIN, Yu.A., retsentent; SIMONS, D.Ya., red.;
POCHTAREVA, A.V., red.izd-va; DOBRITSYNA, R.I., tekhn.red.;
SMIRNOVA, G.V., tekhn. red.

[Manual on safety engineering and industrial hygiene in
machinery industry enterprises] Spravochnik po tekhnike
bezopasnosti i proizvodstvennoi sanitarii dlja pred-
priatii mashinostroenija. Sost. A.I.Ignatok, i dr. Mo-
skva, Mashgiz, 1962. 591 p. (MIRA 15:2)

(Machinery ~~industry~~ Safety measures)

(Machinery industry—Hygienic aspects)

TSYGANOV, Mikhail Nikolayevich; KRASHENINIKOVA, T.M., red.;
KOMAR'KOVA, L.M., red.izd-va; ROMANOVA, V.V., tekhn.red.

[General photography and special types of photography] Ob-
shchaia fotografiia i spetsial'nye vidy fotografii. 'Mo-
skva, Gosgeoltekhizdat, 1963. 363 p. (MIRA 17:2)

TSIGANOV, M. N.

Spravochnik (posobie) aerofotolaboranta. Moskva, Geodesizdat, 1943.
183 p., illus., diagrs.

Title tr.: Handbook for laboratory workers in aerial photography.

TR810.T8

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

PHASE II TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 210 - II

BOOK

Author: TSYGANOV, M. N.
Full Title: PRINCIPLES OF PHOTOGRAPHY AND AERIAL PHOTOGRAPHY
Transliterated Title: Osnovy fotografii i aerofotografii

Publishing Data

Originating Agency: None
Publishing House: Publishing House for Geodetical and Cartographic Literature
Date: 1952 No. pp.: 295 No. of copies: 5,000
Editorial Staff
 Editor: None Tech. Ed.: None
 Editor-in-Chief: None Appraiser: None

Text Data

Coverage: This book brings basic information covering photographic optics and chemistry, the principles of sensitometry, and the negative and positive processes. One short chapter of 14 pages deals with the general characteristics of aerial exposures.

Preface: This book is intended as a textbook to improve the qualifications of workers in air photography laboratories. It can also be used by air photographers, photogrammetrists and topographers.

1/9

Osnovy fotografii i aerofotografii

AID 210 - II

The book is dedicated basically to photographic processes and in particular to their application to aerophotography. The approach to these problems is theoretical without description of equipment.

The first two chapters deal with the parts of optics and chemistry necessary to understand the basic theory of photographic processes. Photographic sensitometry is treated more extensively (Ch. IV) and its application to light-sensitive materials is discussed. The main stress of the book is on the description of processes for the treatment of photomaterials, on photo emulsion and photo-optics and on special methods of photofinishing. Color photography is treated only slightly.

Introduction: None

Abstract: This book is a theoretical, rather popular explanation of basic photographic principles and processes. In spite of the words "aerial photography" in its title, the book brings very little information on this topic. There is only a short chapter dealing with the characteristics of light conditions in aerial photography. The treatment is also very popular. Therefore this book could not be of value to specialists. 2/9

Osnovy fotografii i aerofotografii

AID 210 - II

TABLE OF CONTENTS

	PAGE
Preface	5
Ch. I Information on Optics The nature of photography; laws governing the propagation of light; basic photometric conceptions; spectrum; the nature of light; color of objects; laws of temperature radiation and sources of light; lenses and their properties; basic characteristics of a photographic lens; photographic lenses; basic information on the conception of light.	7
Ch. II Basic Information on Chemistry Oxides, acids, bases and salts; main non-organic substances used in photography; water and hydro-solutions; the concept of electrolytic dissociation and of the value pH; concept of the oxidizing-regenerating reactions; photochemical reactions; general information on organic substances; some main representatives of various classes of organic compounds; benzene and its derivatives; organic developers; description of organic developers.	54
Ch. III Photographic Emulsions General information on a photographic emulsion and 3/9	105

Osnovy fotografii i aerofotografii

AID 210 - II

PAGE

on substances used for its production; scheme of the production of photographic emulsion; spectral sensitivity of an emulsion; composition of the light-sensitive layer; formulae of emulsions for reproductive and diapositive photoplates.

Ch. IV	Sensitometry	122
Exposure and exposure-modulators; transparency, opacity, optical density; set of sensitometrical apparatus; performance of sensitometrical tests; characteristic curve; series of characteristic curves; the basic sensitometrical characteristics and their definition; practical importance of sensitometrical characteristics; determination of spectral sensibility (color sensibility) of photo materials; physical properties of a developed image; the sensibility of photographic paper.		
Ch. V	Photo Materials	166
Negative light sensitive materials; photographic paper.		
Ch. VI	Characteristics of Lighting Conditions of Object Exposed in Aerial Photography	177

4/9

Osnovy fotografii i aerofotografii

AID 210 - II

PAGE

	The exposure of a landscape; spectral reflecting capacity of landscape objects; air haze; determination of time of exposure in aerial photography.	
Ch. VII	The Negative Process	191
	Latent image and its development; general characteristics of a developer; formulae of developers; methods of developing; developing with desensitizing; development of under and over-exposed negatives; fine-grain development; development at raised and lowered temperatures; requirements of fixing solutions and formulae for same; speed of fixing; silver precipitation from used fixing solutions; washing and drying of negatives; preparation of developing and fixing solutions in large quantities; failures in treatment of a negative process; sensitometrical appraisal of photographic quality of negatives and sensitometrical control of the developing process.	
Ch. VIII	Reduction and Intensification of Negatives	243
Ch. IX	Positive Process	259
	Nature of the printing process from a sensitometrical point of view and the transfer of details	
	5/9	

Osnovy fotografii i aerofotografii

AID 210 - II
PAGE

of luminance in the positive; selection of photographic paper according to the negative and to the exposure by printing; developing, fixing, washing and drying of prints; main defects in prints; photographic layers with iron salts and with diazo-compounds.

Ch. X Special Methods of Treatment of Photographic Materials

273

Methods of very rapid treatment of photographic materials at high temperatures; rapid process of obtaining simultaneously a negative and a positive without application of the usual hydro-solutions; the reversal process and method of simultaneously obtaining a positive; simultaneous developing and fixing; physical development.

Ch. XI Elementary Information on Color Photography

286

Color multilayer photographic materials; scheme for obtaining a color negative photographic image; scheme for obtaining a color positive photographic image; color development.

Literature

295

6/9

Osnovy fotografii i aerofotografii

AID 210 - II

BIBLIOGRAPHY (after 1939)

1. Alekseyev, S. S. Tsvetovedeniye (Science of Colors), Gosudarstvennoye nauchno-tehnicheskoye izdatel'stvo legkoy promyshlennosti, Moskva, 1949
2. Baranov, G. S. Voprosy teorii fotograficheskogo vosproizvedeniya (Questions Relating to the Theory of Photographic Reproduction), Goskinoizdat, Moskva, 1949
3. Blyumberg, I. B. Obrabotka kinoplenok i fotoplenok (Treatment of Cinema Films and Photo Films), Goskinoizdat, Moskva, 1950
4. Blyumberg, I. B. Khimiko-fotograficheskiye protsessy obrabotki kinoplenki (Chemical Photographical Processes in Treatment of Cinema Films), Goskinoizdat, Moskva, 1949
5. Bokinik, Ya. I. Teoriya i praktika tsvetnoy fotografii (Theory and Practice of Color Photography), Goskinoizdat, Moskva, 1941
6. Glinka, N. A. Obshchaya khimiya (General Chemistry), Gosudarstvennoye nauchno-tehnicheskoye izdatel'stvo khimicheskoy literatury, Moskva, 1949
7. Gorokhovskiy, Yu. N. Metody fotograficheskoy sensitometrii (Methods of Photographic Sensitometry), Goskinoizdat, Moskva, 1948
8. Dantsiger, A. S. Elektricheskaya lampochka (Electrical Lamp), Gosudarstvennoye izdatel'stvo tekhniko-teoreticheskoy literatury, Moskva, 1949

7/9

Osnovy fotografii i aerofotografii

AID 210 - II

9. Iordanskiy, A., Mertts, K. A., Ovechkis, N., and Chel'tsov, V. Tsvetnaya fotografiya (Color Photography), Goskinoizdat, Moskva, 1949
10. Istomin, G. A. Sensitometriya aerofotomaterialov i aeroekspomemtriya (Sensitometry of Aerial Photography Materials and Aerial Exposure), Voyennoye izdatel'stvo ministerstva vooruzhennykh sil Soyuza SSR. Moskva, 1949
11. Katalog-spravochnik laboratornykh priborov i sborudovaniya, vypusk 31 (Catalog - Manual of Laboratory Apparatus and Equipment, Issue 31), Gosudarstvennoye nauchno-tehnicheskoye izdatel'stvo mashinostroitel'noy literatury, Moskva, 1950
12. Kirillov, N. I. Fiksirovaniye i promyvka fotograficheskikh materialov (Fixing and Washing of Photographic Materials), Goskinoizdat, Moskva, 1948
13. Lyuministsentnyye lampy (Luminescent Lamps), Byuro tekhnicheskoy informatsii. Moskva, 1950
14. Lyalikov, K. S. Teoriya fotograficheskikh protsessov (Theory of Photographic Processes), Goskinoizdat, Moskva, 1947
15. Mertts, K. A. Tsvetnaya fotografiya (Color Photography), Goskinoizdat, Moskva, 1949

8/9

Osnovy fotografi i aerofotografii

AID 210 - II

16. Smorgonskiy, L. M. Uchebnik organicheskoy khimii (Textbook on Organic Chemistry), Goskhimizdat, Moskva, 1945
 17. Trudy Tsentral'nogo nauchno-issledovatel'skogo instituta geodezii, aeros"yemki i kartografi i, vypusk 79 (Transactions of the Central Scientific Research Institute of Surveying, Aerial Photography and Cartography, issue 79), Geodezizdat, Moskva, 1950
 18. Trudy Tsentral'nogo nauchno-issledovatel'skogo instituta geodezii, aeros"yemki i kartografi i, vypusk 82 (Transactions of the Central Scientific Research Institute of Surveying, Aerial Photography and Cartography, issue 82), Geodezizdat, Moskva, 1951
 19. Tsyganov, M. N. Fotografiya i aerofotografiya (Photography and Aerial Photography), Geodezizdat, Moskva, 1949
 20. Yashtold-Govorko, V. A. Melkozernistoye proyavleniye (Fine-Grain Development), Goskinoizdat, Moskva, 1949
- Facilities: Central Scientific Research Institute of Surveying,
Air Photography and Cartography
- Available: A.I.D., Library of Congress.

9/9

MIKHAYLOV, V.Ya.; TSYGANOV, M.N.

Color photographic process in aerial photography. Trudy TSNIIIGAIK
no.107:5-48 '55. (MLRA 9:6)
(Color photography) (Photography, Aerial)

TSIGANOV, Mikhail Nikolayevich; CHEL'TSOV, V.S., redaktor; KOMAR'KOVA, L.M.,
redaktor izdatel'stva; KUZ'MIN, G.M., tekhnicheskiy redaktor

[Principles of color photography and aerial photography] Osnovy
tevetnoi fotografii i aerofotografii. Moskva, Izd-vo geodez. lit-ry,
1956. 175 p. (MLRA 9:10)
(Color photography) (Photography, Aerial)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757310014-2

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757310014-2"

TSYGANOV Mikhail Nikolayevich; IOFIS, Ye.A., kandidat tekhnicheskikh nauk;
redaktor; ZHERDETSKAYA, N.N., redaktor; CHICHERIN, A.N., tekhnicheskiy
redaktor.

[Eliminating defects in photographs] Ustranenie defektov fotogra-
ficheskogo izobrazheniya. Pod red. E.A. Iofisa. Moskva, Gos. izd-vo
"Iskusstvo," 1957. 80 p. (Biblioteka fotoliubitelia, no.14) (MIRA 10:11)
(Photography)

URMAKHER, Leonid Samuilovich; ROMANOV, D.A., kand. tekhn. nauk, dots.,
retsenzent; TSYGANOV, M.N., kand. tekhn. nauk, retsenzent;
APENKO, M.I., kand. tekhn. nauk, red.; SHAMAROVA, T.A., red. izd-
va; SUNGUROV, V.S., tekhn. red.

[Optics of photographic and aerial photogrammetric instruments]
Optika fotograficheskikh i aérofotogrammetricheskikh priborov.
[n.p.] Izd-vo geodez. lit-ry, 1962. 215 p. (MIRA 15:12)
(Photographic optics) (Aerial photogrammetry)

TSYGANOV, M.N., kand. tekhn. nauk

Concerning the article by E.E. Miroshnik "Calculating pipe
for transporting concrete in filling operations." Gor. zhur.
no.9:23-25 S '64. (MIRA 17:12)

TSYGANOV, M.N.

Study of developing baths for processing aerial films in aerial
surveying of high mountain areas. Trudy TSNIIGAIK no.142:
123-136 '61. (MIRA 15:8)
(Aerial photogrammetry) (Photography--Developing and developers)

TSYGANOV, M.N.

Study of "fototsvet" color photographic paper pasted on glass.
Trudy TSNIIGAIK no.142:251-258 '61. (MIRA 15:8)
(Color photography--Printing papers)

KUDERSKIY, Ivan Grigor'yevich; TSYGANOV, M.N., red.; VASIL'YEVA, V.I.,
red.izd-va; SUNGUROV, V.S., tekhn.red.

[Instructions on safety measures in the performance of photo-
grammetric and photographic laboratory work] Pamiatka po
tekhnike bezopasnosti pri vypolnenii fotolaboratornykh i
fotogrammetricheskikh rabot. Moskva, Izd-vo geodez.lit-ry,
(MIRA 15:4)

1961. 55 p.

(Laboratories—Safety measures) (Photography)
(Photogrammetry)

TSYGANOV, M.N.

Improving the quality of aerial negatives of steppe landscapes.
Geod. i kart. no. 4:47-52 Ap '61. (MIRA 14:5)
(Photography—Negatives) (Photography, Aerial)

TSYGANOV, M.N.

Pasting the "Fototsvet" colored photographic paper on glass.
Geod. i kart. no.7:47-51 J1 '61. (MIRA 14:7)
(Color photography)

PHASE I BOOK EXPLOITATION

SOV/5361

Tsyganov, Mikhail Nikolayevich

Osnovy fotografii i aerofotografii (Principles of Photography and Aerial Photography) Moscow, Godezizdat, 1960. 272 p. 6,000 copies printed.

Ed.: K.I. Markhilevich; Tech. Ed.: V.V. Romanova; Ed. of Publishing House; L.M. Komar'kova.

PURPOSE: This book is intended for technical personnel of topographic, geodetic, geological, and aerial survey expeditions. It may also be used by other technicians utilizing photographic methods for professional purposes.

COVERAGE: The book contains information on optics, the fundamentals of sensitometry, the characteristics of black-and-white and color photographic materials, and ground photography; it discusses negative and positive processes for black-and-white and color materials, problems of aerial photography, and the processing of aerial black-and-white and color photographs. No personalities are mentioned. There are 35 references, all Soviet.

-Card 1/9-

TSYGANOV, Mikhail Nikolsyevich; MARKHILEVICH, K.I., red.; KOMAR'KOVA, L.M.,
red.izd-va; ROMANOVA, V.V., tekhn.red.

[Fundamentals of general and aerial photography] Osnovy fotografii
i aerofotografii. Moskva, Izd-vo geodez.lit-ry, 1960. 272 p.
(MIRA 14:3)

(Photography) (Photography, Aerial)

TSYGANOV, M.

The real object is cooperation! Okhr.truda i sots.strakh. 3 no.3:
58-59 Mr '60.
(MIRA 13:7)

1. Glavnnyy tekhnicheskiy inspektor TSentral'nogo komiteta profsoyuza
rabochikh mashinostroyeniya.
(Machinery industry--Hygienic aspects)

TSYGANOV, N.V. (Moskva)

Atheistic education of students in biology lessons. Biol. v shkole
no.1:18-22 Ja-F '62. (MIRA 15:1)
(ATHEISM STUDY AND TEACHING)

TSYGANOV, R.Ya., dots, kand.tekhn.nauk

Some remarks on designing evaporation reservoirs. Avt.dor.
23 no.1:21 Ja '60. (MIRA 13:5)
(Moisture)

3(4)

AUTHORS: Mil'ner, V. S., Candidate of Technical Sciences, 30V/6-59-3-4/16
Tsyganov, M. N., Candidate of Technical Sciences

TITLE: Experience in the Application of the Method of Nonsharp Masks in the Production of Contact Prints and Diapositives (Opyt primeneniya spesoba nerezkikh masok pri izgctovlenii kontakt-nykh otpechatkov i diapozitivov)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 3, pp 26-31 (USSR)

ABSTRACT: To obtain a qualitatively good positive photograph, the method of the nonsharp masks as devised by I. A. Eden (Iden)(Ref 1) and described by V. Ya. Mikhaylov (Ref 2) for the production of contact prints and diapositives of high-mountain regions is specially useful. The method was employed in the TsNIIGAiK. The works were carried out by the laboratory assistants T. I. Kalmykova and G. A. Golubkova under the supervision of M. N. Tsyganov. Some negatives were contrasting to such an extent as to require strong preliminary clearing, otherwise no positive results could be obtained from masking. The combination of the nonsharp masking method with a preliminary strong clearing of the negative makes it possible to observe a great number of details. With a view to prove the advantages offered

Card 1/3

Experience in the Application of the Method of
Nonsharp Masks in the Production of Contact Prints and Diapositives

SOV/6-59-3-4/16

by the masking method, the longitudinal and transverse paralaxes were measured with the precision stereometer SM-3, by the aid of aerial photographs, that were evaluated according to different methods. The results are tabulated. The measurements were carried out by an observer, the technician and photogrammetrist N.F. Sotova. The data obtained clearly show that the accuracy of stereoscopic measurements is almost doubled by an appropriate photographic process combined with the application of the nonsharp masking method. This remains true also in those cases where objects are situated in most difficult areas for the observer. Recommendations are made for the photographic processing of aerial photography in high-mountain regions, with respect to the clearing of aerial photo-negatives and to the preparation of nonsharp masks as well as of positives under the utilization of masks. The only strongly clearing agent is the one using ammonium persulphate. The diapositive obtained from the aerial photonegative serves as mask. On combining the diapositive with the aerial photonegative during illumination the contrast in the negative decreases. To simplify the combination of the aerial photo-

Card 2/3

Experience in the Application of the Method of
Nonsharp Masks in the Production of Contact Prints and Diapositives SOV/6-59-3-4/16

negative with the mask, the latter is made nonsharp and the
minute details are not worked out. There are 4 tables and
2 references, 1 of which is Soviet.

Card 3/3

TSYGANOV, Mikhail Stepanovich, professor; KRAVCHENKO, Z.I., red.;
GUREVICH, M.M., tekhn.red.

[Soil science] Pochvovedenie. Moskva, Gos. izd-vo sel'khoz.
lit-ry, 1958. 254 p. (MIRA 12:1)
(Soils)

TSYGANOV, M. S.

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Soils and Fertilizers

The age of the land as a factor of soil formation and its reflection in the soils of Western Siberia. M. S. Tsyganov (Agro Inst. Voronezh). Pochvovedenie 1953; No. 6, 57-62.
Ts. presents data with reference to the content and distribution of org. matter, N, P, R₂O₅, and H₂O-sol. mineral substances in the soils of Western Siberia to illustrate the general trends in the evolution of these soils. Those which in their evolution have gone through a development in more humid conditions of climate are the soils of a greater age than those of a less humid climate and are of a younger age, and are found in lower vertical zonation. J. S. Joffe

10-14-54 CM

TSYGANOV, M. S.

Steppes

Problem of the desiccation of steppes. Pochvovedenie no. 4 (1952)

Monthly List of Russian Accessions. Library of Congress, August 1952. UNCLASSIFIED

TSYGANOV, M. S.

Steppes

Problem of the desiccation of steppes. Pochvovedenie no. 4 (1952)

9. Monthly List of Russian Accessions, Library of Congress, August 1953. Unclassified.

TSYGANOV, M. S., prof., doktor sel'skokhozyaystvennykh nauk; TROSHCHIY, A. I.

Cutting slit furrows across slopes helps to increase grass yields.
Zemledelie 8 no.10:61-65 O '60. (MIRA 13:10)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Pastures and meadows) (Tillage)

TSYGANOV, N.Ya.

Professor I.D. Sokolov's works on analytical mechanics. Trudy Inst.
1st. est. i tekhn. 22:202-213 '59. (MIRA 12:10)
(Sokolov, Ivan Dmitrievich, 1812-1873)

TSYGANOV, O.I.

Treating chronic tonsillitis with ultrahigh-frequency currents. Ped.,
akush. i gin. 20 no.1:31 '58. (MIRA 13:1)

1. Poliklinicheskoye otdeleniye Khersonskoy detskoy bol'nitsy (glavnyy
vrach - B.B. Medvednik).
(TONSILS--DISEASES) (DIATHERMY)

TSYGANOV, P.

N/5
771.2
.L3

Dokhody gosudarstvennogo byudzheta ot sotsialisticheskogo
khozyaystva (Income of state budget from socialist economy,
by) K. Larionov, I. Golovanov, P. Tsyganov. Moskva, Gos-
finizdat, 1954. 216 p. tables.

TSYGANOV, P.
SUCHKOV, A.

"Income in the state budget derived from the socialist sector of
the economy." [professor] K.Larionov, I.Golovanov, P.TSyganov,
Reviewed by A.Suchkov. Fin.SSSR 16 no.4:86-88 Ap '55. (MLRA 8:3)
(Revenue), (Larionov, K.) (Golovanov, I.)

TSYGANOV, P.

4261. TSYGANOV, P. -- Dokhody gosudarstva nnogo byudzheta ot sotsialisticheskogo khozyaystva. (Ucheb. posobiye dlya fin. i fin. - Kreditnykh tekhnologii). M. Gosfinizdat, 1954. 216 c. 23 sm. 15,000 ekz. (1-y zavod 1-10 gys.) 5p. 75k. V per.--Na per plate avt. ne ukazany. -- (55-405)p

SO: Knizhnaya Letopsis', Vol. 1, 1955

LARIONOV, K., professor; GOLOVANOV, I.; TRYGANOV, P.; KRIVENKO, A.,
otvetstvennyy redaktor; YEHIMEYEVA, O., redaktor; DENISOVA, O.,
tekhnicheskiy redaktor.

[National budget revenue from a socialist economy] Dkhody gosudarst-
vennogo biudzheta ot sotsialisticheskogo khoziaistva. Moskva, Gosfin-
izdat, 1954. 216 p.
(Internal revenue)

TSYGANKOV, P.

All-Union Interuniversity Conference on the Theory and Practice of
Rectification in the Chemical and Food Industries. Izv. vys.
ucheb. zav.; khim. i khim. tekhn. 4 no. 2:328-332 '61.

(MIRA 14:5)

1. Sekretar' Orgkomiteta Vsesoyuznoy mezhvuzovskoy konferentsii po
teorii i praktike rektifikatsii v khimicheskoy i pishchevoy
promyshlennosti.

(Distillation, Fractional--Congresses)

TSYGANKOV, P.S.

Analysis of the operations of fractionating columns. Trudy KTIPP
no.19:93-100 '58.
(Distillation, Fractional)

/

STABNIKOV, V.N.; TSYGANKOV, P.S.

Possibility of using packed columns for distilling and rectifying
alcohol. Spirt.prom. 22 no.2:4-7 '56. (MLRA 9:8)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti
imeni Mikoyana.

(Distillation apparatus)

TSYGANKOV, P.S.

Increasing the output of alcohol of the highest purity. Spir. prom. 22 no.2:21-22 '56. (MLRA 9:8)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti imeni Mikoyana.

(Alcohol)

LOZOVAY, D.A., kand. tekhn. nauk; KOSTIN, A.A., inzh.; OSTROVSKIY, A.;
TSYGANOV, R.; CHVANOV, V.

Reviews and bibliography. Avt. dor. 28 no.4:30-42 Ap '65.
(MIRA 18:5)

TSYGANOV, R.

Using the method of electromechanical analogies in road
design. Avt. dor. no.10:8 O '64.
(MERA 17:12)

TSYGANOV, R.Ya., kand.tekhn.nauk

Take into consideration physicomechanical properties of soils.
Avt.dor. 25 no.7:20-21 Jl '62. (MIRA 15:8)
(Soil mechanics)

TSYGANOV, R.Ya., dots., kand. tekhn. nauk

Valuable aid ("Automobile road intersections" by A.A.Milashechkin.
Reviewed by R. I.A. TSyganov). Avt. dor. 21 no. 7:29 Jl '58.
(MIRA 11:8)

(Roads--Design)
(Milashechkin, A.A.)

TSYGANOV, R.Ya.; ULAZOVSKIY, V.A., red.; TOKIN, A.N., red.;
KADIL'NIKOVA, A.F., red.; KURDYUKOV, G.V., red.; KOVRIN,
Ye.I., red.; BARANSKIY, A.V., red.

[Introducing new equipment and the achievements of science into industry] Vnedrenie novoi tekhniki i dostizhenii nauki v proizvodstvo. Volgograd, 1963. 215 p.
(MIRA 18:3)

1. Volgograd. Institut inzhenerov gorodskogo khozyaystva.

TSYCANOV, R.Ya.

Evaluating the causes of the development of landslide phenomena
by the correlation method. Izv. vys. ucheb. zav.; geol. i razv.
7 no.11:131 N '64. (MIRA 18:5)

1. Volgogradskiy institut inzhenerov gorodskogo khozyaystva.

SVISTUNOV, V., assistant; TSYGANOV, S.

Expand and improve food supply to the fields. Obshchestv. pit.
no. 7:27-28 Jl '62. (MIRA 15:10)

1. L'vovskiy torgovo-ekonomicheskiy institut (for Svistunov).
2. Starshiy instruktor otdela obshchestvennogo pitaniya Vinnitskogo oblastnogo soyuza potrebitel'skikh kooperativov (for TSyganov).

(Vinnitsa Province--Restaurants, lunchrooms, etc.)

ACC NR: AP6025315

SOURCE CODE: UR/0433/66/000/006/0006/0007

AUTHOR: Tsyganov, S. (Chief agronomist)

ORG: Kustanay Plant Protection Station (Kustanayskaya stantsiya zashchity rasteniy)

TITLE: Implementation of low-volume spraying

SOURCE: Zashchita rasteniy, no. 6, 1966, 6-7

TOPIC TAGS: herbicide, aerial spraying, dichlorophenoxyacetic acid, weed killer,
AMINE SALT, ESTER, SODIUM COMPOUND

ABSTRACT:

Small-scale aerial and ground-machine spraying of crops with herbicides in Kustanay Oblast' (USSR), which began in 1962, increased from 558,000 ha in 1963 to 1,285,000 ha in 1965. The successful use of 2,4-D, its butyl and octyl esters, and sodium and an amine salts is reported. The sodium salt of 2,4-D is used only in mixtures with the esters or the amine salt; it gives 80—85% weed mortality. The application of fungicides and insecticides is also reported.

[W.A. 50; CBE No. 10]

SUB CODE 0407 / SUBM DATE: none/

Card 1/1

UDC: 632.982.2

ACC NR: AP7000009

SOURCE CODE: UR/0076/66/040/011/2854/2859

AUTHOR: Tsyganov, S. A.; Bakhman, N. N.

ORG: Institute of Chemical Physics, Academy of Sciences, SSSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

TITLE: Effect of ratio of components on the combustion rate of condensed mixtures

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 11, 1966, 2854-2859

TOPIC TAGS: combustion rate, perchlorate, plexiglass, polystyrene, polyformaldehyde plastic, polypropylene plastic, graphite, tungsten

ABSTRACT: The combustion of mixtures of NH_4ClO_4 with fine powders of plexiglass, polystyrene, polyformaldehyde, polypropylene, urotropin, and bitumen and also mixtures of KClO_4 with plexiglass, polypropylene, urotropin, dextrin, graphite, and tungsten was studied in a 2-liter bomb in nitrogen. The maximum of the combustion rate u_{\max} for mixtures of the two oxidizers with volatile mixtures (dextrin, urotropin, plexiglass) was found to lie relatively close to stoichiometry, and for mixtures with non-volatile fuels (graphite, tungsten), to shift toward excess fuel. As the particle size of the oxidizer increases, there is a slight but distinct displacement of u_{\max} toward excess fuel. As the pressure is increased in the case of NH_4ClO_4 + volatile fuel mixtures, u_{\max} is not changed appreciably, but in the case of KClO_4 + volatile

Card 1/2

UDC: 541.12

ACC NR: AP7000009

fuel, u_{\max} shifts toward excess fuel. Orig. art. has:
5 figures and 2 tables. [27]

SUB CODE: 21,07 SUBM DATE: 09 Jul 65 / ORIG REF: 004 / OTH REF: 009 /
ATD PRESS: 5109

Card 2/2